



Hybrid Inverter MHS-8K-30

15A

Max. PV Input Current

80V

Start-up Voltage

30A

Max. Charge/Discharge

Residential | Single-Phase | HV Battery | 2 MPPTs



Maximized Energy Harvesting

- 160% DC oversizing boosts solar capture
- Starts at 80V for more generation time
- Continuous 110% AC overloading sustains power
- Smooth transition to backup power ensures continuity during power outages



Engineered for Versatility

- Wide 85-450V range fits diverse batteries
- IP65 protects both indoors and outdoors
- Silent 25dB operation for comfort



Intelligent Energy Dynamics

- 7 work modes for diverse use
- Supports both ToU and dynamic pricing strategies for optimized energy use and cost savings
- Centralized smart management for efficiency



Simplified Interaction

- Remote upgrades maintain system health
- Solinteg I-light for quick status checks
- OLED and App for easy control



Integ M Series

The Power Master

MHS-8K-30 Hybrid Inverter

Models		MHS-8K-30
PV Side		
Max. PV Array Power	[kWp]	12.8
Max. PV Input Voltage *	[V]	600
Rated PV Input Voltage	[V]	360
Start-up Voltage	[V]	80
MPPT Operating Voltage Range *	[V]	100-550
No. of MPP Trackers		2
No. of Strings per MPPT		1/1
Max. Input Current per MPPT	[A]	15/15
Max. Short-circuit Current per MPPT	[A]	20/20
Battery Side		
Battery Type		Lithium-ion
Battery Voltage Range	[V]	85-450
No. of Battery Input		1
Max. Charge/Discharge Current	[A]	30/30
Max. Charge/Discharge Power	[kW]	8/8
Grid Side (On-Grid)		
Rated Output Power	[kW]	8
Max. Output Apparent Power	[kVA]	8
Rated AC Voltage		L/N/PE; 220/230/240V
Rated AC Frequency	[Hz]	50/60
Rated Output Current	[A]	36.3/36.3/33.3
Max. Output Current	[A]	36.3
Power Factor		0.8 leading ...0.8 lagging
THDi (@Rated Power)		<3%
Max. Input Apparent Power **	[kVA]	12
Rated AC Voltage		L/N/PE; 220/230/240V
Rated AC Frequency	[Hz]	50/60
Max. AC Input Current	[A]	52.17
Back-up Side (Off-Grid)		
Rated Output Power	[kW]	8.0
Peak Output Apparent Power	[kVA]	10.4@10s
Rated Output Voltage		L/N/PE; 220/230/240V
Rated Output Frequency	[Hz]	50/60
Rated Output Current	[A]	36.3/36.3/33.3
On/Off-grid Switching Time		< 10ms
THDv (@Linear Load)		<3%
Efficiency		
MPPT Efficiency		99.90%
Max. Efficiency		97.60%
European Efficiency		97.00%
Protection		
Integrated Protection	DC reverse polarity protection / Battery input reverse connection protection / Insulation resistance protection / Surge protection(DC/AC: Type II/Type II) / Over-temperature protection / Residual current protection /Islanding protection / AC over-voltage protection / Overload protection / AC short-circuit protection	
General Data		
Dimensions	[W×H×D mm]	534×418×210
Weight	[KG]	27
Ingress Protection		IP65
Standby Self-consumption	[W]	< 15
Topology		Transformerless
Operating Temperature Range	[°C]	-30~60
Relative Humidity	[%]	0~100
Max. Operation Altitude	[m]	3000
Over Voltage Category		II(PV+Battery), III(Mains)
Cooling		Natural Convection
Noise Level	[dB]	<25
Display		LED & OLED
Communication		CAN, RS485

* PV Max. input voltage is 550V without battery, or 500V with battery, otherwise inverter will be waiting;

** Max apparent power from the grid means the maximum power imported from the utility grid used to satisfy the backup loads and charge the battery;

(1) G98: 3.68kVA; (2) G98: 16.00A; (3) VDE-AR-N 4105: 4.6kW; (4) VDE-AR-N 4105: 4.60kVA;